

average calculated from range of error of the regression line ( $0.3853 \pm 0.08085$ ) is negligible. The take of wholemeal in gm divided by the factor of 14 would give the approximate number of rats in a population of this weight-structure (Table 2). Apparently the same factor can generally be used for census work; if the populations are not known to differ basically from that considered presently.

#### ACKNOWLEDGEMENTS

We are thankful to Professor S. M. Alam, Head, Zoology Department, AMU, for facilities and encouragement. Special thanks are due to Dr S. N. U. A. Kirmani, Department of Statistics, AMU, for helping with statistical calculations.

ZOOLOGY DEPARTMENT,  
AMU, ALIGARH, (U.P.),  
May 30, 1973.

DEVENDRA BHARDWAJ  
JAMIL AHMAD KHAN

#### REFERENCES

- BAILEY, N. T. J. (1959): Statistical methods in Biology. English University Press, London.
- CHAKRAVARTI, I. M., LAHA, R. G. & ROY, J. (1967): Handbook of methods in applied statistics. Vol. I. John Wiley & Sons, New York.
- DEORAS, P. J. & GOKHALE, M. S. (1958): Some biometrical observations on the common rats of Bombay. *J. Bombay nat. Hist. Soc.* 55 (3): 450-459.
- EVANS, C. S., SMART, J. L. & STODDART, R. C. (1968). Handling methods for wild house mice and wild rats. *Lab. Animals* 2: 29-34.
- HARRISON, J. L. & WOODVILLE, H. C. (1949): Variation in size and weights in five species of house rats (Rodentia, Muridae), in Rangoon, Burma. *Rec. Indian Mus.* 47 (1): 65-71.
- (1950): Notes on the feeding habits of house-rats in Rangoon, Burma. *Ann. Appl. Biol.*, 37 (2): 296-304.
- LESLIE, P. H. & RANSON, R. M. (1954): In 'Control of rats and mice', Vol. II. pp. 335-349, Clarendon Press, Oxford.
- MAJUMDAR, S. K., KRISHNAKUMARI, K. & URS, Y. S. (1966): Some observations on food preferences and intake of rats under different ecological conditions. *Proc. Indian Rodent Symp.*, pp. 124-136.
- PARRACK, D. W. (1966): Food consumption in three common Indian rodents. *ibid.*, p. 137. *Proc. Indian Rodent Symp.*, p. 137.
- SPILLET, J. J. (1966): Growth of three species of Calcutta rats. *ibid.*, pp. 177-196. *Proc. Indian Rodent Symp.*, pp. 177-196.

#### 7. GOLIATH HERON IN THE SUNDERBANS, WEST BENGAL

While on a visit to the Sunderbans I observed a Goliath Heron (*Ardea goliath*) at the mouth of one of the creeks on 22 March 1974. Although I had not seen the bird before I am quite familiar with this impressive heron from photographs and had, indeed, hoped to see it when in Africa. The Goliath heron was not in my mind when soon after dawn we approached the mouth of the creek in the Forest Department's launch

*Banashree*. I spotted a heron feeding and it took off as I raised my glasses and flew slowly in front of me. I had no hesitation in exclaiming 'Goliath heron', but checked myself at the thought that I had never heard of it in the Sunderbans area.

On my return to Calcutta I consulted Finn (cannot remember title) and found that Goliath herons had appeared in Calcutta market in 1845-46. I was later able to consult the HANDBOOK and found that the Goliath heron had last been recorded in 1925 in the Khulna Sunderbans (now in Bangladesh), only a few miles from where I found it.

The HANDBOOK describes the Goliath heron as essentially an African species, and a rare vagrant to India. Apart from the records in the Calcutta market and the Khulna Sunderbans already mentioned, Hume saw six gigantic herons near Multan in 1873 which were probably Goliaths, Blanford saw one near Nagpur and one in Baluchistan, and Stuart Baker saw five on the Meghna near Dacca in 1910. Ceylon has records in 1878 and 1879 but not since.

It seems probable that the Goliath heron is regularly to be found in the Sunderbans area, and the lack of reports is solely due to the absence of knowledgeable bird watchers. The great size and fine plumage resembling a brighter coloured Purple heron are distinctive.

1100, MORGES,  
SWITZERLAND,  
May 30, 1974.

PETER F. R. JACKSON

#### 8. ? THE LITTLE GULL, *LARUS MINUTUS* PALLAS, IN KUTCH

On visits to the Great Rann of Kutch in April 1956, April 1957, March 1960, and again as recently as January 1974, I observed rather distant flocks of a puzzling gull which it struck me at the time could, by all the rules of the game, be no other than the Little Gull, *Larus minutus* Pallas. I did not publish this earlier in view of the extreme paucity of records of this species in the Indian subcontinent (a single specimen from Ladakh, and a possible sighting in Bombay Harbour--INDIAN HANDBOOK 3: 37), and lack of positive conviction on my own part. However, on the latest visit to the Rann (23/24 January 1974) I was able to watch a fairly large flock sufficiently closely to support my earlier conjecture, though confirmation must still await a specimen. At first the birds, which were in winter plumage, looked like winter